

ALIGNMENT OF NOTCH HOMOLOGS

	POTENTIAL SIGNAL CLEAVAGE SITE →	Egf Reports	
human2	MP-----	ALRAL LVALLALWLC CA-----APA HA	113
human1	MP-----	PL LAPLLCLALL PA-----LAA RG	109
XenN	MD-----	RIGLAVLLCS LP-----VLT QG	109
DrosN	MSQSRSSRRS RAPNTVTVFV INKHAVASL PASLPIILLT LAFANLPNV RGTITALVAA SCTSYG--CD NGGTCYQLN GKTYCACDSH YGDYCEHKN PCN-SRRCN GGTCDVTFN GRPGCSKCP LGFTESLCEI AVPMAC-IHV		146
human2	PCNLGGTCHH LSRDI-YECT CQVGTGKEC QWTDACLSP CANGSTCTTV --ANQFSKVC LTFGTQKCE TQWEC-DIP GHCHGGTGL NLPSYQCC PQGTGQYCD SLVPCAPSP CVMGGTCRDT GQFTFENCL PQFEGSTCEP		259
human1	PCRNGGTCL L1-L1EYKR CPPGNSGKSC QBADPCASNP CANGGGLPF --EASYTIC PPSTHPTKR QVNECCQKP RLGRGGTCH NEVGSYRCVC RATHTEPNC RPYVPCSPSP CVMGGTCRPT GQVTHECAQL PGFTQGNCEE		256
XenN	PCRNGGTCEL LNSVTEYKCR CPPGNTGDISC QBADPCASNP CANGGGLPF --E1QYTCVC PPFTHGATCK QDINEC-S-Q NPCKNGGQCI NEFGSYRCTC QWRTGQNCQ EPYVPCNPSP CLNGGTCTRT DQTSYDCTCL PGFSGQANCEE		255
DrosN	TCLNGGTCL KT-LEETICA CANGYTGERC ETKNLCASSP CRNGATCTAL AGSSYTCSC PPFTGQNTCS YDIEEC-Q-S NPCKYGGICV NTHGSYQCH PTGYTGKQCD TKYNPCSPSP CVMAGTCRSP G-LSYECKCP KQFEGKNECD		292
human2	N1DDCPNRC QNGGCVQGV NYNCRCPQ VTEGCTEDV DECLLPNA- CONGGTCANR NGGVCVQV QNSQDSCSN IDICAFASCT PGSTCDRVA SFSCNCPCK AGLCHLDDA C1SNPCNKA LCDNPLNGQ Y1CTCPGCK		408
human1	N1DDCPGNC KNAGCVQGV NYNCPQPE VTEGCTEDV DECOLPNA- CONGGTCHNT HGGVCVQV QVTEGDCSN IDICASAACF HGATCHRVA SFYCEPHGR TOLLCHLDDA C1SNPCNKS NCDTNPNKG A1CTCPSTYT		405
XenN	N1DDCPNNC RNGGTCVQGV NYNCRCPD VTEGCTEDV DECOLPNA- CONGGTCHNT YGGVCVQV QVTEGDCSN IDICANAACH SGATCHRVA SFYCEPHGR TOLLCHLDDA C1SNPCNKS NCDTNPNKG A1CTCPSTYT		404
DrosN	NYDDCLGHL QNGGTC DGI SDYTCRPPN FTGRFCDDIV DECAQRHPV CONGATCTMT HGSVSCVQV GHAQLDCSN TDDCKQAACF YGATCIDGVG SFYQCTCKK TOLLCHLDDA CTSNCPHADA 1CUTSPINGS YALSCATGCK		442
human2	GADCTEDVIE CAVANSNPE HAGKQVNTIG AFHECLKGY AGPCEMDIN ECHSDPCOND ATCLDKIGF TOLCHPFGV VHELEINEC QSNPCVWNG CVQKVPFGC LCPPGTGPV CQDIDIDCSS TPCLNGAKCI DHPNCEYDQC		558
human1	GPACSDVIE CSLG-ANPCE HAGKQVNTIG SFECQCLGY TGPCEIDVN ECYSNPCOND ATCLDQIGF QCHMPGVEG VHEVNTDEC ASSPCLNCR CLDKINEFDC ECPYTGHL CQYDVDECAS TPCKNGAKCL DQNTYTCVC		554
XenN	GPACNDVIE CSLG-ANPCE HGGKQVNTIG SFQNCPCQY AGPCEIDVN ECLSNPCOND STCLDQIGF QCTMPGVEG LYCEINIDEC ASNPCLNKG CLDKINEFRC DCPYTGSLN CQHFDECTS TPCKNGAKCL DQPNSTYDQC		553
DrosN	GVDCSEIDE CQCG--SPCE HNGICVNTIG SYRNCSDGF TGPCEININ ECESHPQNE GSCLDQGT REVCHPFTG TQCEIDIDEC QSNPLNDGT CHQKINGK SCALGTGAR CQDINDIDCOS QPCKNGKCH DSIAGSYCEC		590
human2	ATGFTGVLCE ENINDCPDP CHHGQDDGI DSYTCINPG YNGA1CSDOI DECVSSPCLN DGRCDLVNG YQNCQPGTS GVANCEINFDD CASNPCIHG- 1CHUGTNRYS CVCSPGFTG RCNIDIDECA SNPKRGATC INGVNGFRCI		707
human1	TEGTYGTHCE VDIDECIDP CHYGSCKQGV ATFTCLCRPG YTGHECTINI NESSQPCRL RGTCDPNA YLFCCLKGT GPNCEINLDD CASSPCISG- TCLKIDGVE CACEPGYTES HCNKNIDECA QNPCKNGKTC EDGNGFTCR		703
XenN	TEGFTGRHCE QDINECIPDP CHYGTCKDGI ATFTCLCRPG YTGRLCNDI NECLSKPCLN GGCCTRENG Y1CTCPKGT GVANCEIKTDD CASNLCDNG- KCTDKIDGVE C1CEPGYTK LCNININECD SNPKNGKTC KQDINGFTCV		702
DrosN	PPGYTGTSCE ININDCSDP CHQKCIDIV NSFKCLCRPG YTGFTCKDGI NEESNPPCF DGHCDRVGS YYCQDAGTS GKUCEVWNE CHSNPCNKA TCDIGTNSYK CQCVPGFTG HCKKNIDECI SSPCANNGVC 1DDVNGYKCE		740

FIG. 2A

humN2	CPCEPHPC	YSWNECLSN	PCI-HGNCIG	GLSOKYKCLD	AGVINGINEV	IKNECLSNPC	GNKGTICNLV	NGYRICCKG	FKYNGICVNI	DECASNPCLN	GGTCEDDISG	YTCICVLPT	GKNDITVLAP	CSPNPCEWNA	VCKESPFAES	856
humN1	CPCEGHDPIC	LSEWNECLSN	PCV-HGACDD	SLNGYKCDOD	PGWSTGNCID	NNNECSNPC	WNGTKCKDNT	SGIVCTGREG	FSPNCDINI	NECASNPCLN	KGTCIDIVAG	YKCNLLPT	GATCEVLAP	CAPSPCKNGG	ECROSEDIYES	852
XenN	CPDGYDHHIC	LSEWNECLSN	PCI-HGACDD	GNGYKCDCE	AGUSGNCID	NNNECSNPC	WNGTKCKDNT	GATYCTKAG	FSPNCDINI	NECSSNPCLN	HGTCIDIVAG	YKCNLLPT	GATCEVLAP	CALSPCKNGG	RCKSEDIJET	851
DrosN	CPREFYDHC	LSWNECLSN	PCVNEURCED	GIMEFTCHP	PYTGKREEL	DIDECSSNPC	GHGCTYKAL	MAFSCHCPG	YTGKCEINI	DIDCTNPCHN	GGTCIDIVAG	YKCVCKPPT	GRDCSNIP	CASNRCKNEA	KCTPSSNIFLD	890

humN2	YTCLCA-POV	QGORCTTID	EC-ISKPCN	HGLCHNTG	YNECEPPG	GNDCEIDID	CLANPCNGG	SCMGNTIFS	CLCLPGFTD	KCDIDNECL	SEPKNGGTC	SDYVNSYTC	CDHFGDVC	ENINICTES	SCFNGGTCVD	1004
humN1	FSCVPTAGA	KGATEVOIN	EC-VLSPCH	GASCONTHG	YRCHDAGS	GRNCEIDID	CRPNPCNGG	SCDGTINTAF	CDCLPGFRT	FEEDINECA	SUPKNGANG	TDCVSYTCT	CPAFSGIHC	ENITPDCTES	SCFNGGTCVD	1001
XenN	FSCCEP-POV	QGOTCEIDNN	EC-INRPPCH	GATCONTNG	YKCNKPGYT	GRNCEIDID	CDPNPCNGG	SCSDGIMWF	CNCPAGFRT	KCEDINECA	SUPKNGANG	TDCVNSYTC	CDPFGSIHC	ESNTPDCTES	SCFNGGTCID	999
DrosN	FSTCK-LGY	TRYCEDID	ECSLSPCH	GASCLNPGS	YRCLTKGYE	GRDCAINTDD	CASPCHNGG	TCLDGLDYS	CLCVDFDK	HCEIDINECL	SUPKNGANG	SDYVNSYTC	CPLGSGINC	GTNDECTES	SCDNGGSCID	1039

humN2	GINSFCLCP	VGF-TGSCLH	EINECSSHPC	LINEGTCVQL	GYRCSCLP	YTGNCOTLV	NLCRSSPCN	KGTCHVKKAE	SQCLCPGVA	GAYCDIPNS	CDIAASRPGV	LVEHLCHSG	VCIMAGNTHY	CDPCLGYTGS	YCEQLDECA	1154
humN1	GINSFCLCP	PGFTGSCYCH	VINECDSPC	LLGTCODOR	GLHRTCPDG	YTGNCOTLV	HUECDSPCN	GGKCHTHTD	YRCEPSGT	GLYCDIPNS	CEVAARDGV	DIVARLCHGG	LCYDIAGNTHH	CRCDAGYTG	YCEDLVECS	1151
XenN	GINFTCDP	PGFTGSCYCH	DINECDSPC	LNKGTCDOSY	GYKCTCPDG	YTGNCOTLV	RUCDSPPCN	GGKCHTHTD	YRCECKSGT	GYCDIPNS	CEVAARDGV	DIVARLCHSG	NCVDTGNTHF	CRCDAGYTG	YCEQVDECS	1149
DrosN	GINGYNCSL	AGYSGANDY	KLNKCDSPC	LNKATCHEON	NEYTCHPSG	FTGKCEYV	DUGDSPPEN	GATCSOKHD	FSCKCSAGT	GKLDVOTIS	CDIAADKQL	SLRCL-NG	TCKDYGNSHV	CYCSOGYAGS	YCKEIDECO	1188

humN2	SNPCDHGATC	SDF-IGYRCE	CHPGYGVNC	EYEVDECDN	PCONGGTCID	LVNFKCSOP	PGTRGLCEE	NIDDCAR	-----	GFHCLN	GGCHURITGG	YSRCLPGA	GERCEGINE	CLSNPSCSE	SLDCLQLND	YLCVCRSAFT	1297
humN1	PSPCONGATC	TDYLGYSCK	CVAGYHGVNC	SEEIDECLSH	PCONGGTCID	LPNTYKCSOP	RGTOGVHCEI	NVDDCNPPVD	PVSRSPKCN	NGTCVDNNG	YSCDPPGV	GERCEGVNE	CLSNPCDARG	TONGVORVND	FHCECRAGT	1301	
XenN	PNPCONGATC	TDYLGYSCE	CVAGYHGVNC	SEEIDECLSH	PCONGGTCID	LINTYKCSOP	RGTOGVHCEI	NVDDCTPFYD	SFTLEPKCN	NGKIDRVGG	YNCICPPGV	GERCEGVNE	CLSNPCDSRG	TONCLQLVND	YRCECRGFT	1299	
DrosN	SUPPCONGGTC	RULIGAYECO	CRDGFEGONC	ELNIDDCAPN	PCONGGTCID	RVNFKCSOP	PGTMGITCEI	NKDDCKP	-----	GACHN	NGSLIDRVGG	FECVCPGV	GERCEGINE	CLSNPSCNAG	TLDVCLVNN	YHCHORPCHN	1330

humN2	GRHCEITVDV	CPOMPCLNG	TCAVASNPD	GFICRPPGF	SGARCS	---	SGGWKCRKG	EDCVHTAS	---	GRPCTPSP	---	RUCES	---	GC-ASSPCD	HGGSCHPORD	PPVYSCCAP	PFSGSRCEL	-YTAPP	-----	S	-----	TPP	1422
humN1	GRCEESVING	CKGKPCNGG	TCAVASNTAR	GFICKCPAGF	EGATENDAR	TGCSRLNG	GTCISUPR	---	SPICLCLPF	TGCECPPAS	SPELGNPCY	NGTCEPTE	SPYRCLCPA	KFNGLLCHIL	DYSFG	---	-GAGRIDPPP					1444	
XenN	GRCEESVING	CKGKPCNGG	TCAVASNTAR	GFICKCPAGF	EGATENDAR	TGCSRLNG	GTCISVLT	---	SSKVCESGY	TGATCDIPVI	SPC-ASHPEY	NGTCDFAE	EPFTQCEPK	NFNGLECHIL	DYEFPG	---	-GLKNIIPP					1441	
DrosN	GRHCEKVDV	CADSPCHNG	NCN	---	RDS	GHICLONNG	YKNCLESGD	DEDSNPRVG	-NCVADLGF	GYRCEPRT	LGHECEIDTL	DEC-SPNCPA	QGAACELLG	D--YECLEPS	KUKGRCDY	DANTPCWNGG	SGSGNDRYAA					1473	

FIG.2B

Lin-12/NOTCH REPEATS

humN2	---A---	TL	SOYCAIKARD	GVCIEACNSH	ACGVIGGDCS	LTHNPVANC	SSPLPCVDYI	NI-QDELCH	TVECLDNFE	CGGNSKTK-	-YDKYCAIH	KDNHCNCGN	SECGVUGLD	CAADPEN-L	AEGTLVIVL	HPPEQLLODA	1562			
humN1	LIE---	ACE	LPECEADGN	KVCSLCNNH	ACGVIGGDCS	LNFNDRPKNC	TQSLQCWKY	STGHCSGCH	SAGCLDGGD	CDRAEGGCH	LYDYCKCH	STGHCSGCH	SAECEVUGLD	CAEHPER-L	AAGTL-VVV	LPPPEQLONS	1589			
XenN	DNDD---	ICE	NEDESELAIN	KVCNANCNNH	ACGVIGGDCS	LNFNDRPKNC	TQSLQCWKY	NDGKCSGCH	NTGCLYDGD	CDKVEVGCNP	LYDYCKCH	QDGHCSGCH	NAECEVUGLD	C-ANPEN-L	AEGTLVIVL	HPPELKNONS	1586			
DrosN	DLEQRAMCD	KRGCTEKQGN	GICDSQNTY	ACNFUGNDCS	LGT-NPVANC	TAN-ECVNC	KNGKCNEN	MACHYDGD	CERKLSCDS	LFDAYCKHY	GDFGCVGCN	NAECEVUGLD	CENKDSVYL	ALGANSVYL	MNVEAFREIQ	1621				
humN2	R-SF	RALGT	LLHNLRIKR	DSGELHWYP	YGEKSAANK	KD--R	-----	HTRRSL	PFGE	-----	E	QEVAGSKVFL	EIDNRGCVQD	STHCFKNIDA	AAALLASHAI	QG---T	LSYP	LVSVSESLT	PERT-Q-LTY	1680
humN1	SFHL	RELNR	VLHNVVFKR	DAHGGQWIFP	YGRDEELRK	HPKRAEGV	AAPDALLGV	KASLPGGSE	GRRRELIP	MDVRGSIYVL	EIDNRGCVQD	SSDCEUSATD	VAAFGLGALS	LGSI-NIPYK	IEAVGSETVE	PPPPAQ-HF	1737			
XenN	V-NFL	RELNR	VLHNVVFKK	DSKGEYKTY	YGCNEELKK	HTIKRSTDYV	SDAPSAL	-----	-FSTHKESTL	LGRHRELDE	MEVRGSIYVL	EIDNRGCVQD	SSDCEUSATD	VAAFGLGALS	LGSLDLSYK	IEAVKSENNE	TPKPSI-LYP	1730		
DrosN	A-QFL	RNWSH	MLRTTVRLCK	DALGUDIIN	VKNVRVPRI	EDTDFARNK	ILYQQVHQ-	-----	---TGTOIYL	EIDNRKCTEC	FTHAVEAEF	LAATAKNQL	RNUDQ-IHSV	RGIKNPGQED	NCEPPANKY	1745				
humN2	LLAVAV	VITL	FILLGVINA	KRKRK--HIS	LVLPEGTLR	RDAUNKRRE	PVGDAVGLK	NLSVGVSEAN	LIGIGTSEHV	VQDE	-----	G	POPCKVKAED	EALLSE-EDD	PIDRRPVTOQ	HEADIRRT	PSALTPQA	1812		
humN1	MYVAAA	AFVLL	LFFYEGCVLL	SKRRRRHGO	LWPEGEKV-	SEASKKRRE	ELGDSVGLK	PLK-NASDGA	LMDNONE-V	GOED	-----	LETCKRFEE	PVWLPD-LDD	QTDNRQVTOQ	HLDAAIL-RH	SNAPTPPG	1866			
XenN	MLSHL	VITPL	LIFVFAHVIV	NKKRRRHDS	FGSPALFK	NPA-KRNGET	PV-EDSVGLK	PIK-NHTDGS	FMDNONE-V	GOEET	-----	LENKRFEE	QVILPELYDD	KTDPRQVTRQ	HLDAAIL-RI	SSNAPTPPG	1860			
DrosN	VITG	LITL	VIT	ALAFFGHVL	STORKRHGV	TWPEGEFRAP	AAVNSRRRD	PHGEMHNLN	KOVANSGGV	GQPCAH-V	SDDESIMPLP	HRRSDPVSG	VELGNNGCYA	SDHTWSEYE	EADNRVSDA	HLDDVIV-R	ATM--TPP-A	1886		
humN	EQEVDV	LDVN	VRGPDGCTPL	HLASLRGSS	DLSDIEDAE	DSSANTITD	VYGCASLDQ	TDRIGEWALH	LAARYSADA	AKRLDAGAD	ANADNNGRC	PLHAAVAADA	GVFQILIRN	RYTLDARHN	DGTTPLILAA	RLAVEGNVAE	1962			
TAN-I	EVDADCHVN	VRGPDGCTPL	HLASLRGGL	ETGNSEEE-E	DAPA-VISDF	TYGCASLHND	TDRIGETALH	LAARYSSDA	AKRLLEASD	ANIDNNGRT	PLHAAYSADA	GVFQILIRN	RATLDARHN	DGTTPLILAA	RLAVEGNLED	2014				
XenN	EIEADCHVN	VRGPDGCTPL	HLASLRGGL	ETGNSEEE-E	DASANNISDF	IGGGAQLHND	TDRIGETALH	LAARYARADA	AKRLLESSAD	ANVDNNGRT	PLHAAVAADA	GVFQILIRN	RATLDARHF	DGTTPLILAA	RLAVEGNVEE	2009				
DrosN	HQDGGKHVD	ARGPCGLTPL	HLAAVRGGL	DTGEDJENNE	DSTAQVTSOL	LAQGAELNAT	MOKTGETSLH	LAARFARADA	AKRLDAGAD	ANCDNNGRT	PLHAAVAADA	MGVFQILIRN	RATNLNARHH	DGTTPLILAA	RLAIEGNVED	2036				
humN	LINCQADVNA	VDDHGSALH	VAAAVNNVCA	TLLLLKNGAN	RMDNNDKEET	PLELAAREGS	YEAKTILLDH	FANDITIDH	DRLPDVARD	RHHDIIVLL	DEYNVTPSP	---GTVL--TS	ALSPV	-----	ICGP	NRSFLSKHT	2097			
TAN-I	LINSHADVNA	VDDLKGSALH	VAAAVNNVDA	AVILLKNGAN	KMDNNDKEET	PLELAAREGS	YETAKVILLDH	FANDITIDH	DRLPDIAD	RHHDIIVLL	DEYNLRSPQ	LHGAPLGTP	TLSPP	-----	LCSP	NGVLSKPG	2153			
XenN	LINAHADVNA	VDEFGKSALH	VAAAVNNVDA	AVILLKNSAN	KMDNNDKEET	SLELAAREGS	YETAKVILLDH	YANDITIDH	DRLPDIAD	RHHDIIVLL	DEYNLRKSP	LHNGPLCAT	TLSPP	-----	ICSP	NGYMGWQPS	2147			
DrosN	LITADADVNA	ADNSGKTALH	VAAAVNNVTEA	WILLHMHAN	RMDNDKDEET	PLELAAREGS	YEACKALLDH	FANDITIDH	DRLPDVASE	RLHHDIIVLL	DE-HWRSQ	MLSNTPQMI	GSPPPGGAP	QLITOPTVIS	ACNGNNGNG	2185				

FIG.2C

	NLS	CKH	cde2	cde2	
humN2	PHGKKSRRPS AKSTMTSLP NLAKAKDAK GSRKKKLSK KVLQSE--SS VTLSPTVLE SPHTVSDTT SSPH				2169
humN1	VQCKKVRKPS SKGLAGCS--KEAKULK A-RRKKSDIG KGLLD--SS GMLSPVLSLE SPKHLSDVA SPPL				2219
XenN	VDSKKARKPS IKNGC--KEAKULK A-RRKKSDIG KTLTDSGSS GVLSPVLSLE STHTLSDSV SPPL				2213
DrosN	NASGKSDNOT AKOKAA--KKAKL TE GS-PDNLDA TCSLRKRASS KKTSAASKA ANLNLNPDQ LTGVSGVPG VPTTNSADA AAAAAAVAA MSHELESPV GVCHGGLPS PYDTSSWYN ANAAPLANGN PNTGAKDPHS				2327
	BMS				
humN2	ITSPGILQAS PNPWL--ATA APPAPVHAQH ALSTSHLEH Q-----PLAIDASTV LPSVQLLSH HTIVSPGS--GSAGLSRLH PVPVPAIV--MNRHENVETQ				2263
humN1	LPSPT--GDS PSVPLNHLPG MPDTHLGTH LNVA--KPEM AALGGGRLA FETGPRLSH LPVAGTSTV LGSSGGALN FTVGGSLSLN GDCVLSRLQ SCWPNQVNP LRGSVAPCL				2336
XenN	HTSPF--GDS PSWPLNHLTS MPESQLGNH INWAY-KQEN AA--GSNRHA FDMVPRLT TH L-WASSPNTI MS---NGSH FTVGGAFTNH SDCVLLARLQ NGWVQNDYDP TRNGIQDGN-				2323
DrosN	YEDLTKNADS WDSLQNLGLD MTKLDNYAYS MESP--DQE LLNGGGLGN GNGRNGVCP GVLPGCLCM GGLSGAGNCH SHEQLSPPY SNWSPPHSVQ SSLALSPHAY LGSPSPAKSK PSPTSPTHI QAMRHATQOK DTGGSNLNSL				2475
	CK11				
humN2	YNEWFWILA PAEG-YHPG APDSRPPECK-----HITPRE PLPP-IV-TF QLTPKSTAD PAG-----APQDSTC PPVAVGRLPT MYQIP-----CH ARL-PSVAF P TAWPQDQDQ VARTILPAYH				2387
humN1	SYDAPSLDHG -HYGLHSSL AASALSDHNS-----YDGLPSTRL ATDPLVOTO QVQPNLNQD QNLQNPANTQ QDQSLQPPPP PPQPHLGVS AASGLGRSF LSGEPSDADV QPLCPSSLAY HTLPQ-ESP ALPTSLPSSL				2474
XenN	ADQADALDHG LMTS-LHNL PATTLSMHT-----YDAMPNTRL ANQPHLMQDQ QMDDQN-----LQLHGS HQDQHN-SS TTSHTINSPE CSSDLSQTLQ QDM--SSNWI HSWPQ-DTQ IFAASLPSNL				2440
DrosN	LGANGGGVY GGGGGGGGV GGGPNSPVS LGTTSPTGSD MCTNLAPPQS SKNSATMHTT SPQDQDQDQD QDQDQDQDQD QDCLGLEFG SAGLDLNG-F GCSPTSTHSG QMWPPS---I GSSNSG-SSP STNNLSPSSD				2625
	PEST-CONTAINING REGION				
humN2	PPPASVGYKP TPSSSHSYAS SNAERTPSH SGHQLGELPPY LTPSPESPID VSSSSPSSA-SDNSDVTSP TPGGAGGGGR GPGTHNSEPP HNNH QVYA				2471
humN1	VPPVTAAGFL TPSSSHSY-S S-PVENTPSH QLWP-EHPF LTPSPESPID VSSSSPSSHW SDNSEGVSSP PT-----SHQ SQARIPEAF K				2556
XenN	TQSHTTAGFL TPSSSHSY-S S-PHNTPSH QLWP-DHPF LTPSPESPID VSSSSPSSHW SDNSEGVSSP PT-----SHQ PQRTHPEAF K				2523
DrosN	HNDQAFYQVL TPSSSHS-----GGHTPDH LVQTL-D-SY PTPSPSPGH VSSSSPSSH-SDNSEGVQSP AANNLYTSGG HQANKGSEAI YI				2703

FIG.2D

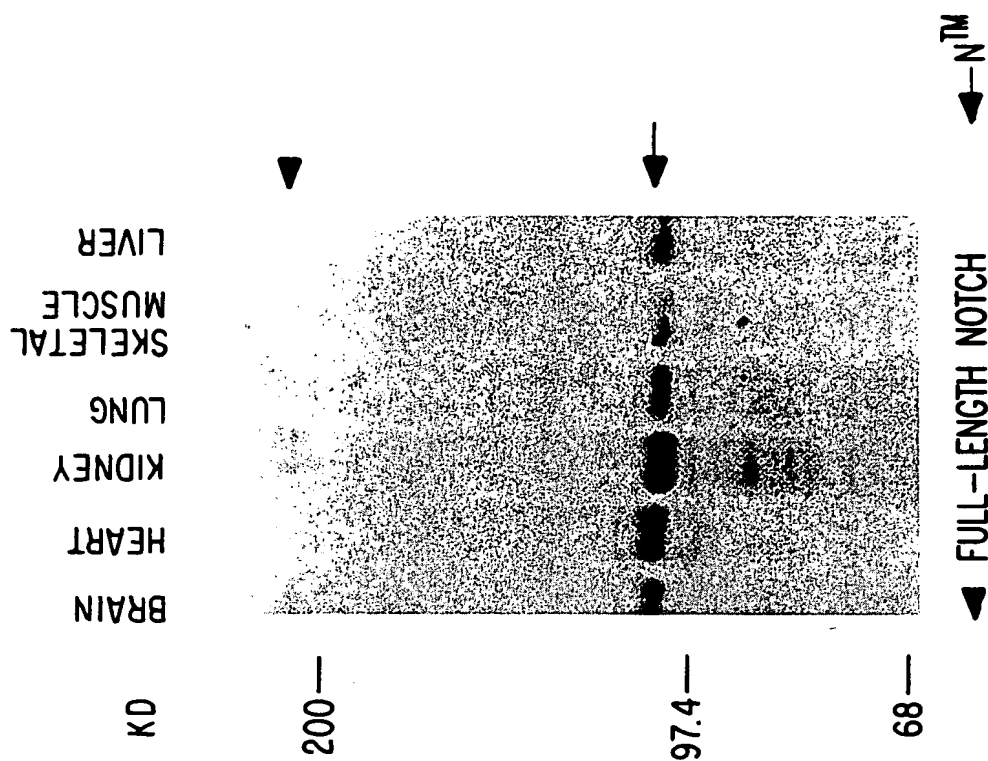


FIG.3B

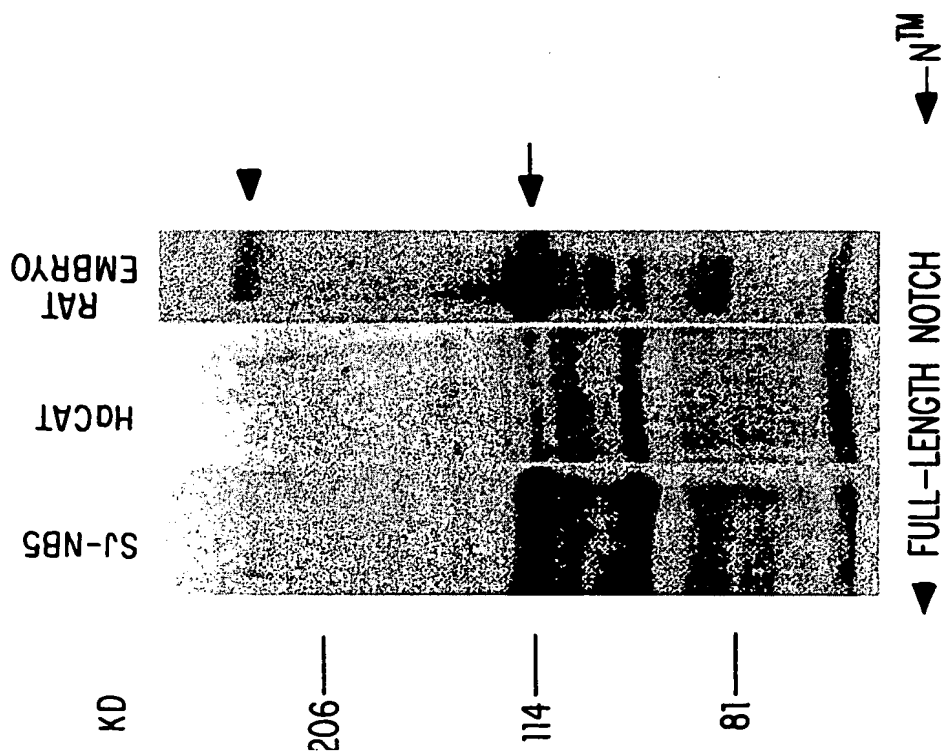


FIG.3A

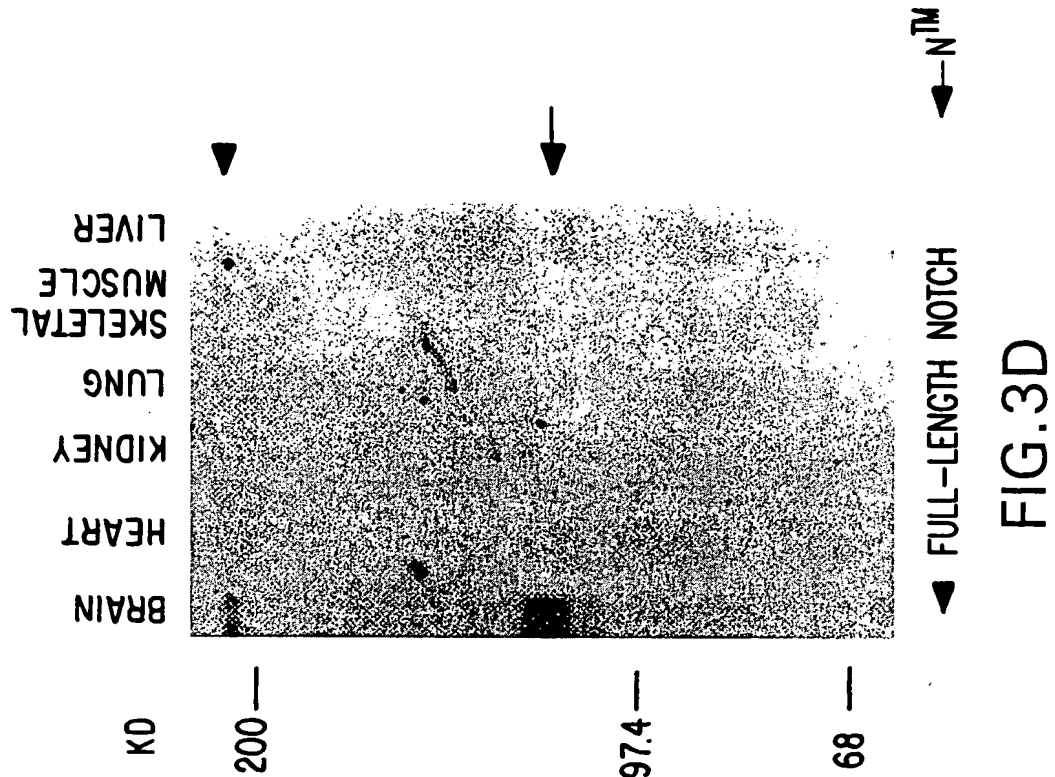


FIG.3D

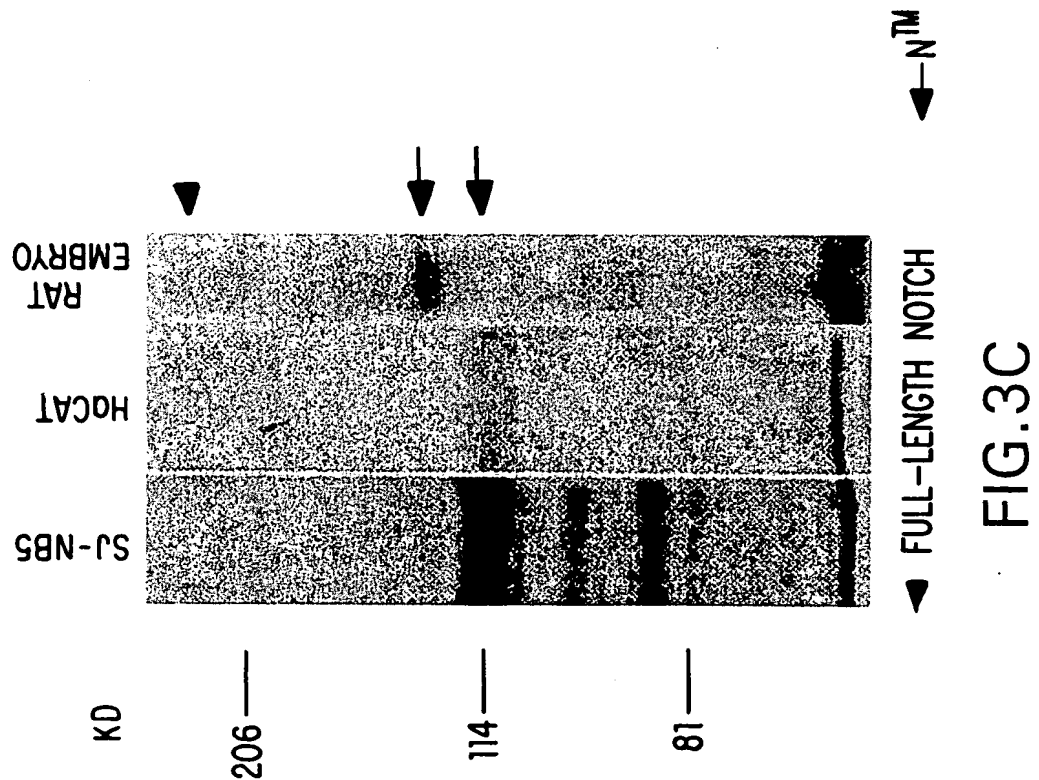


FIG.3C

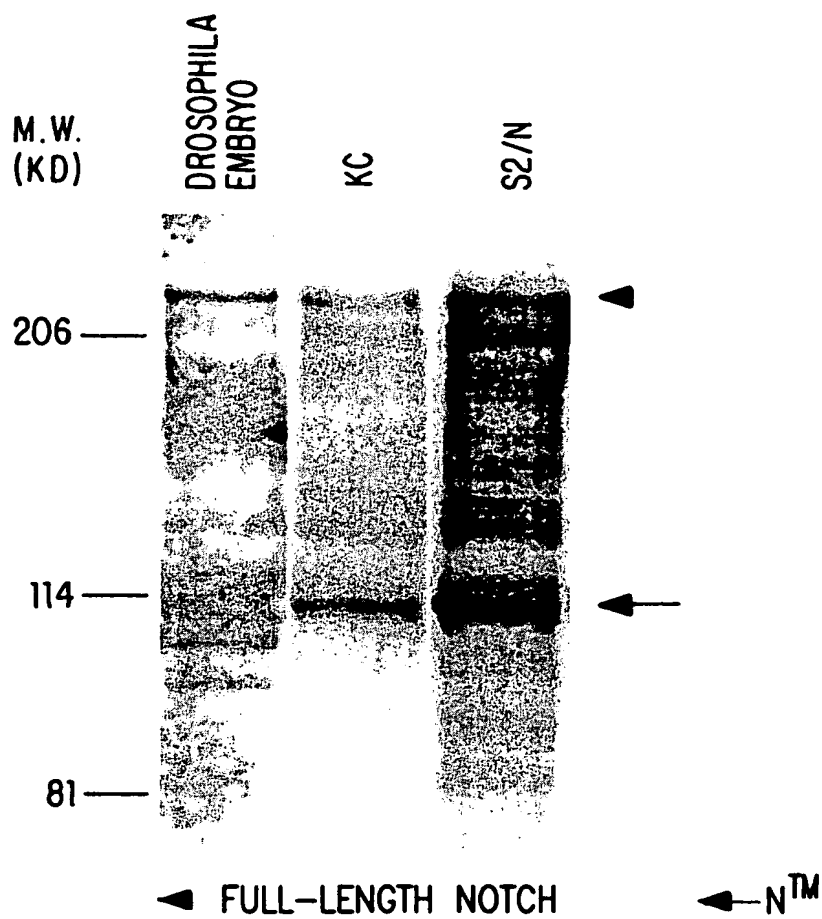


FIG.3E

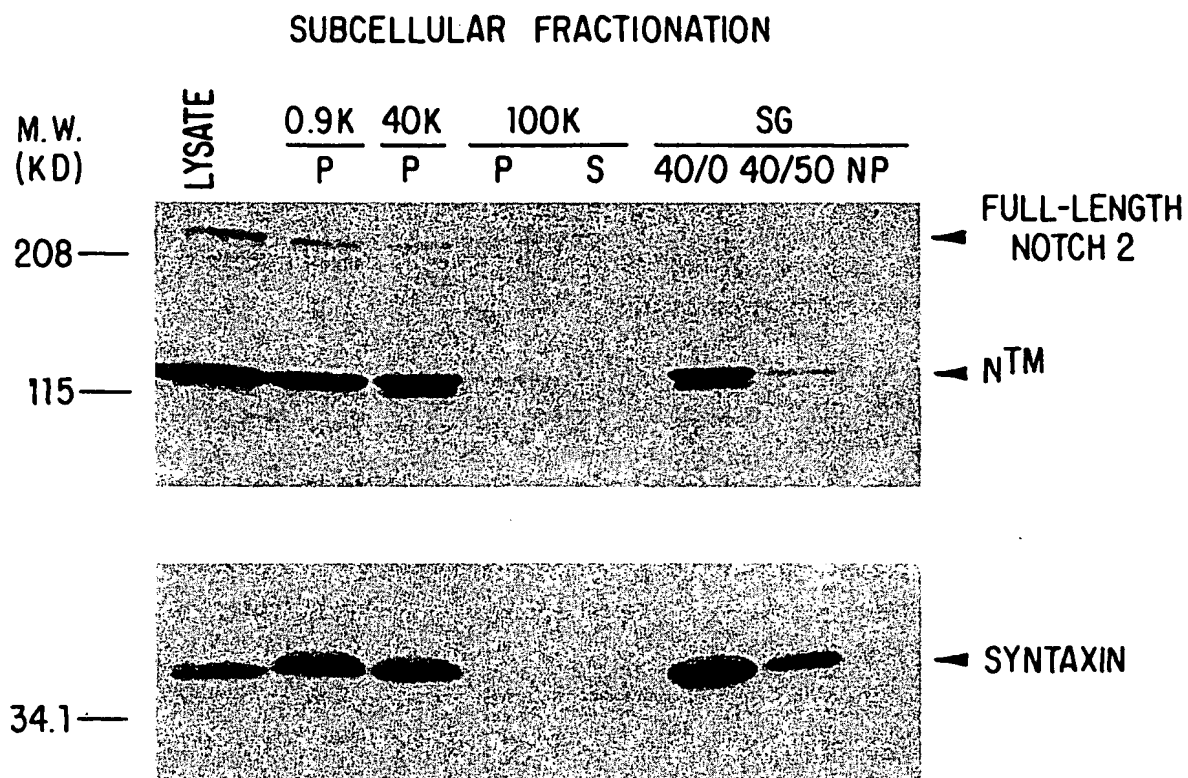


FIG.4

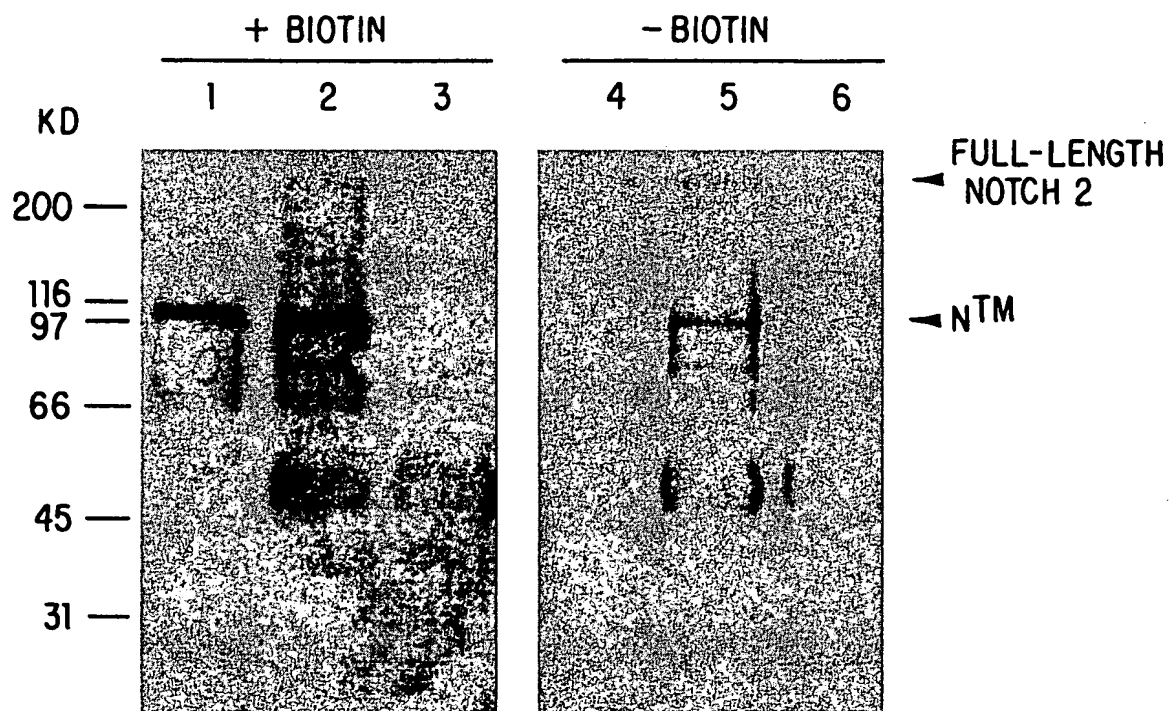


FIG.5

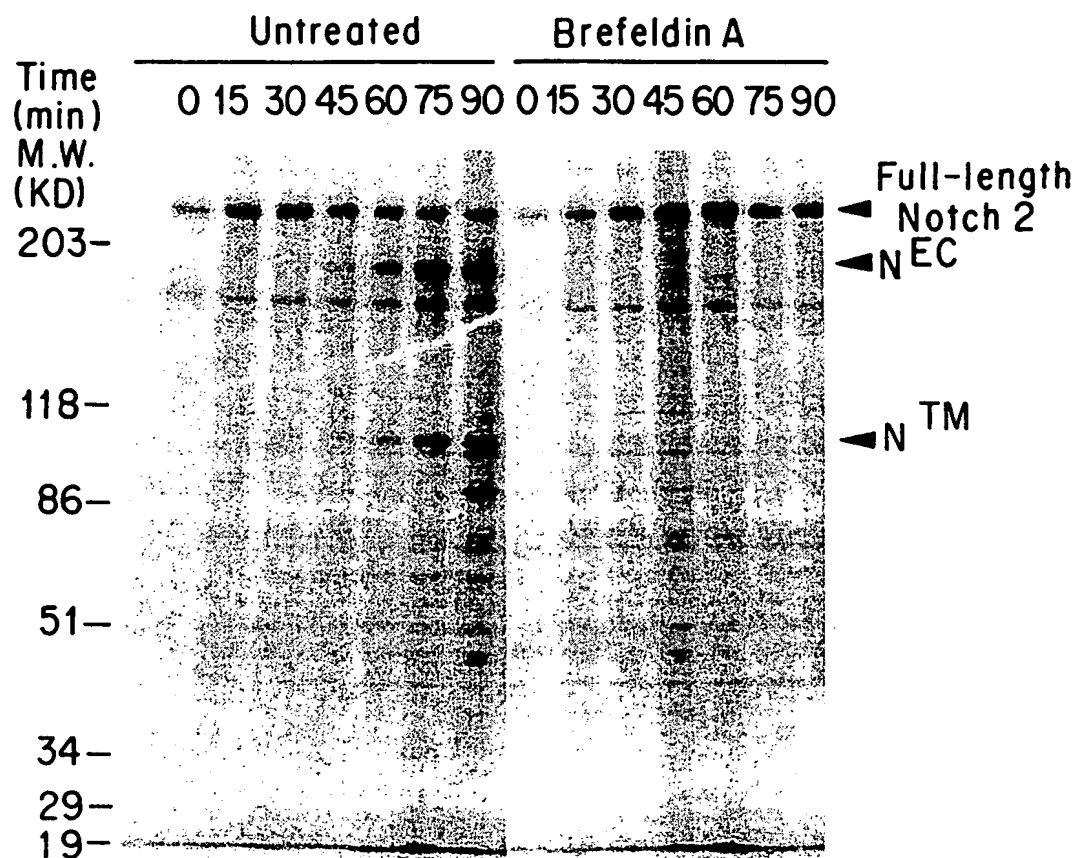


FIG.6A

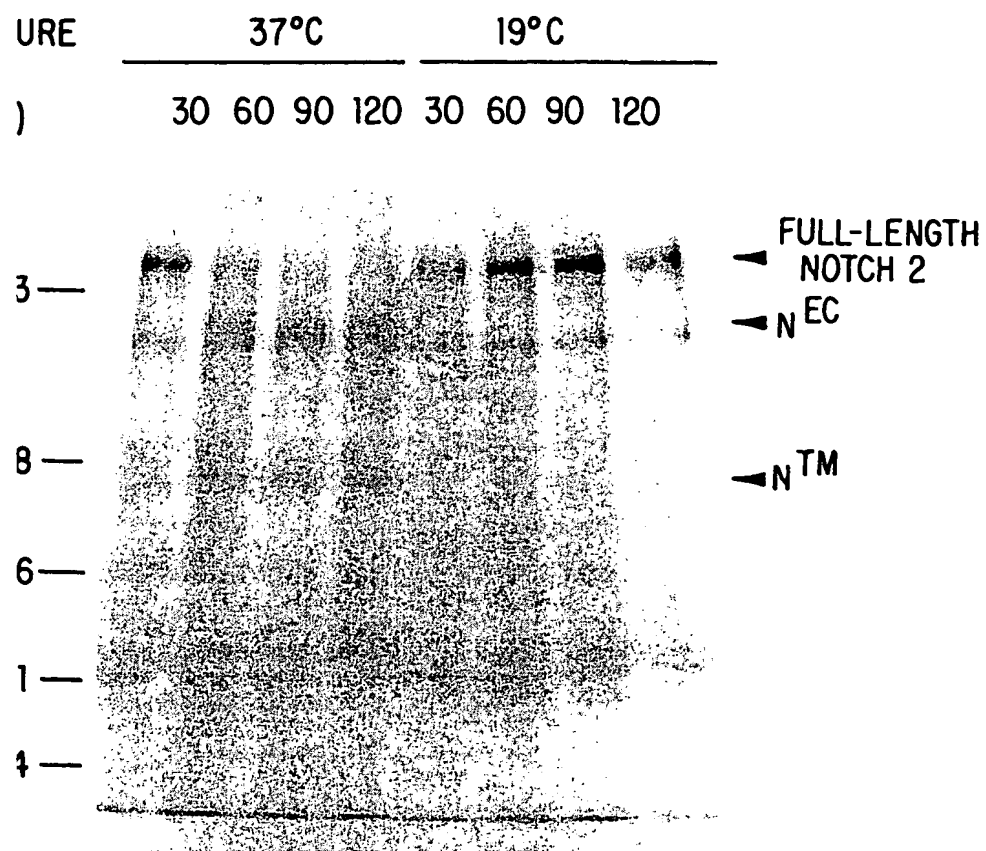


FIG.6B

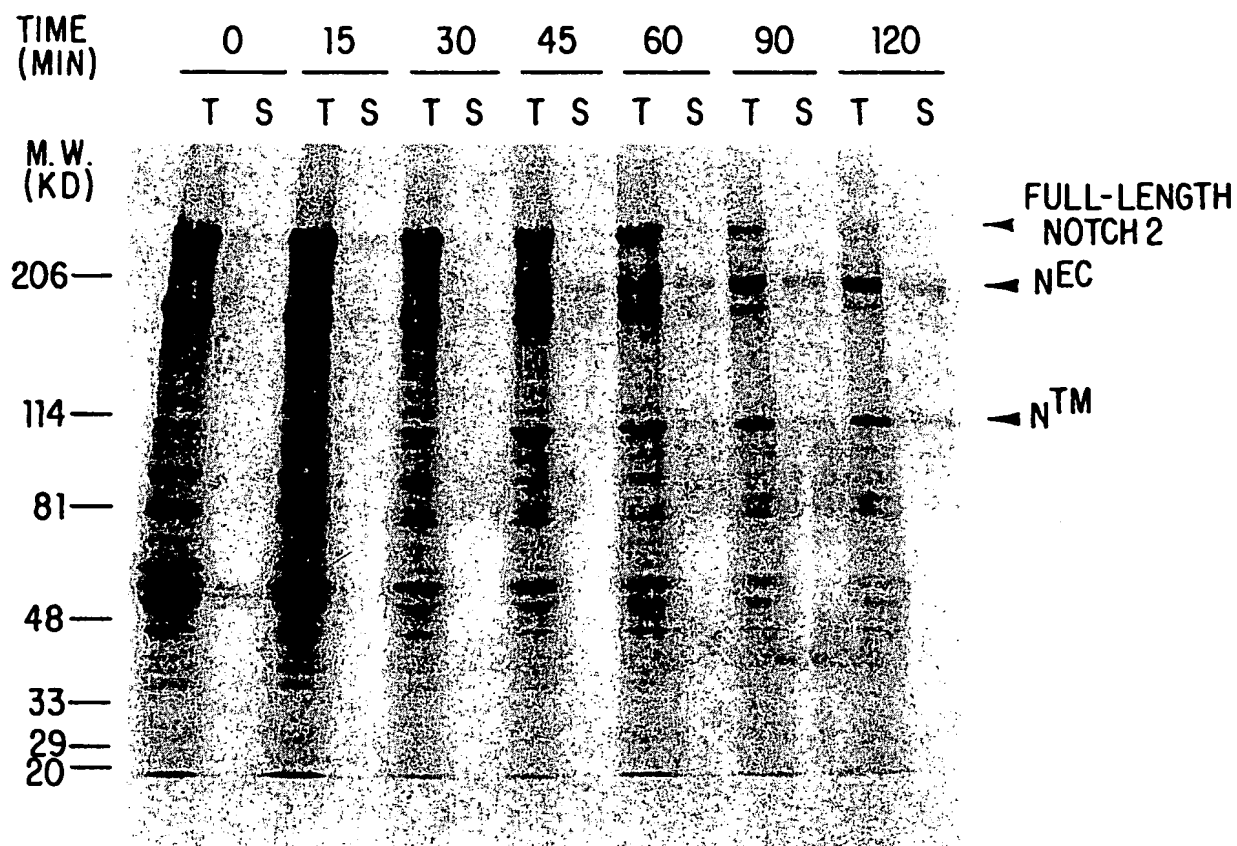


FIG. 7

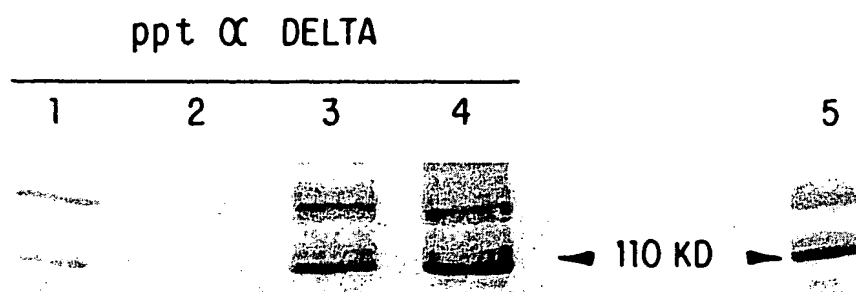


FIG.8

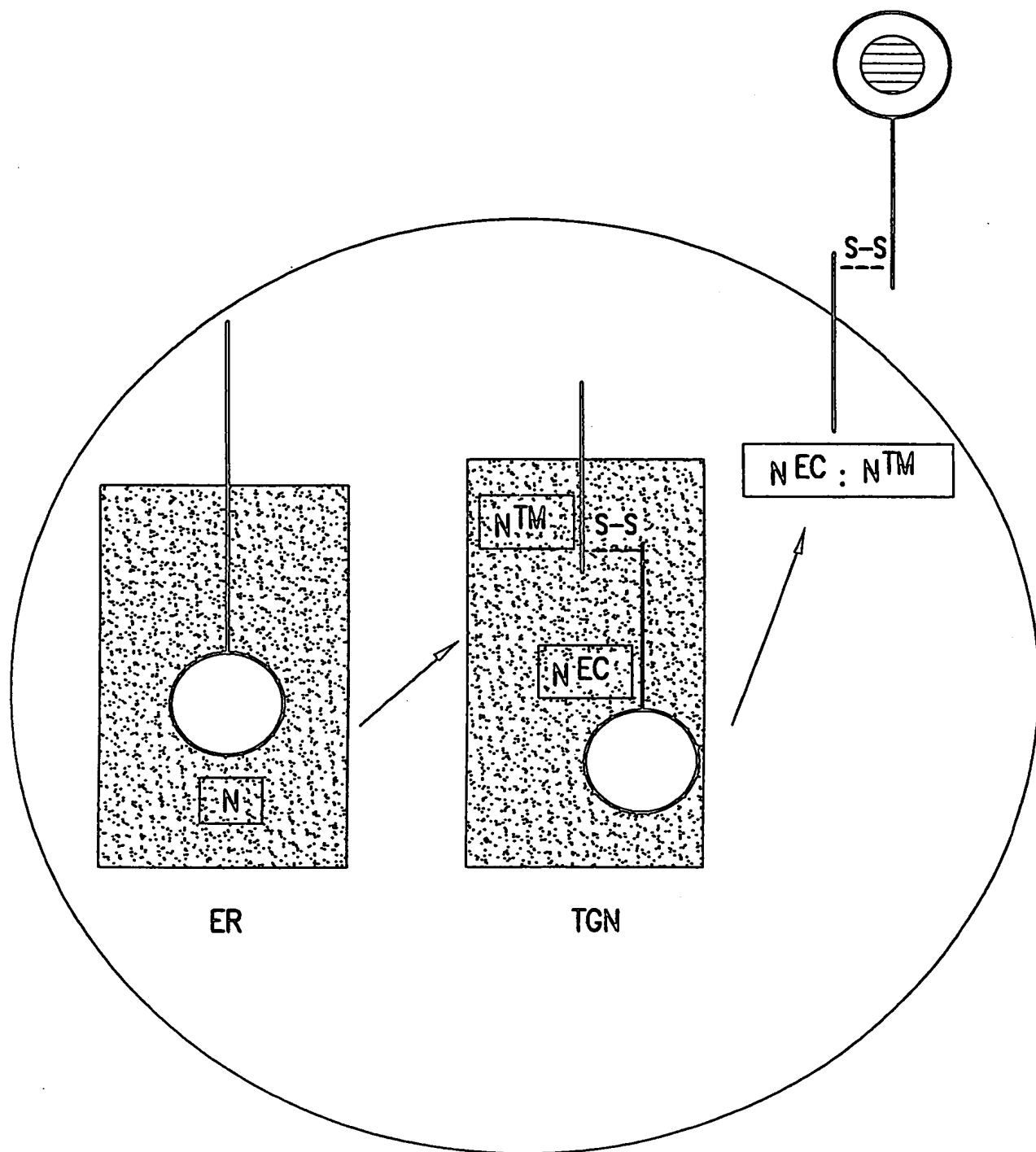


FIG. 9

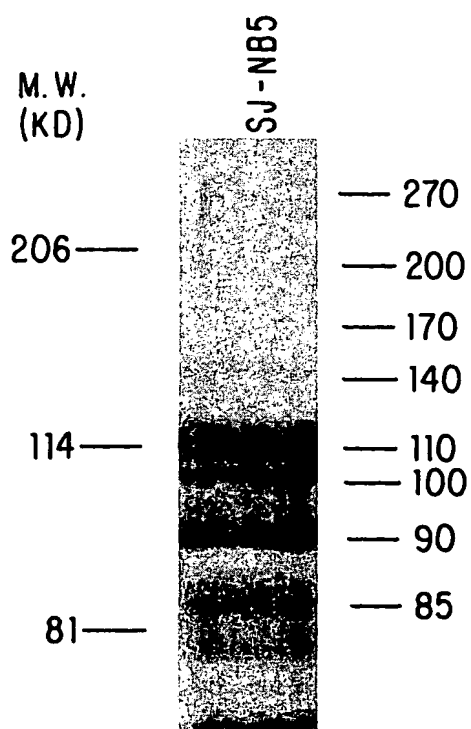


FIG. 10A

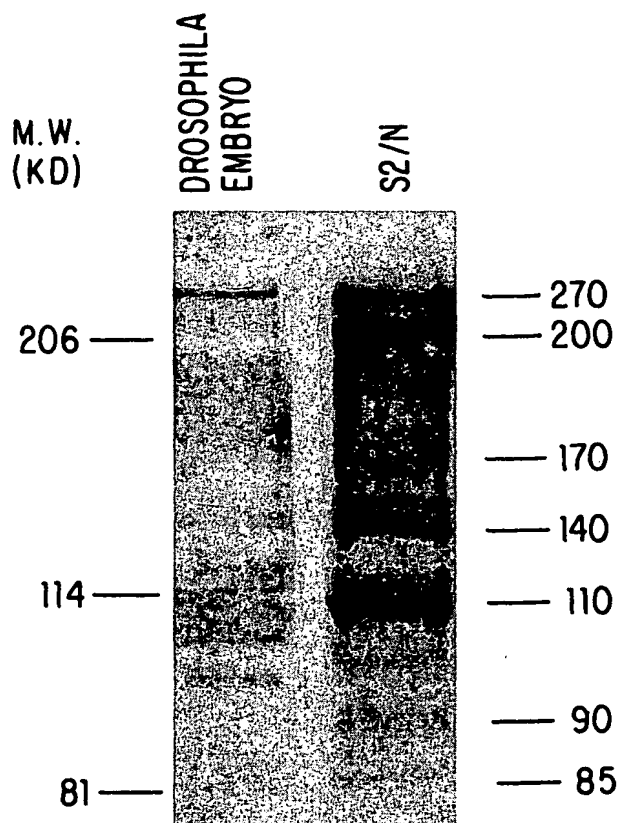


FIG. 10B

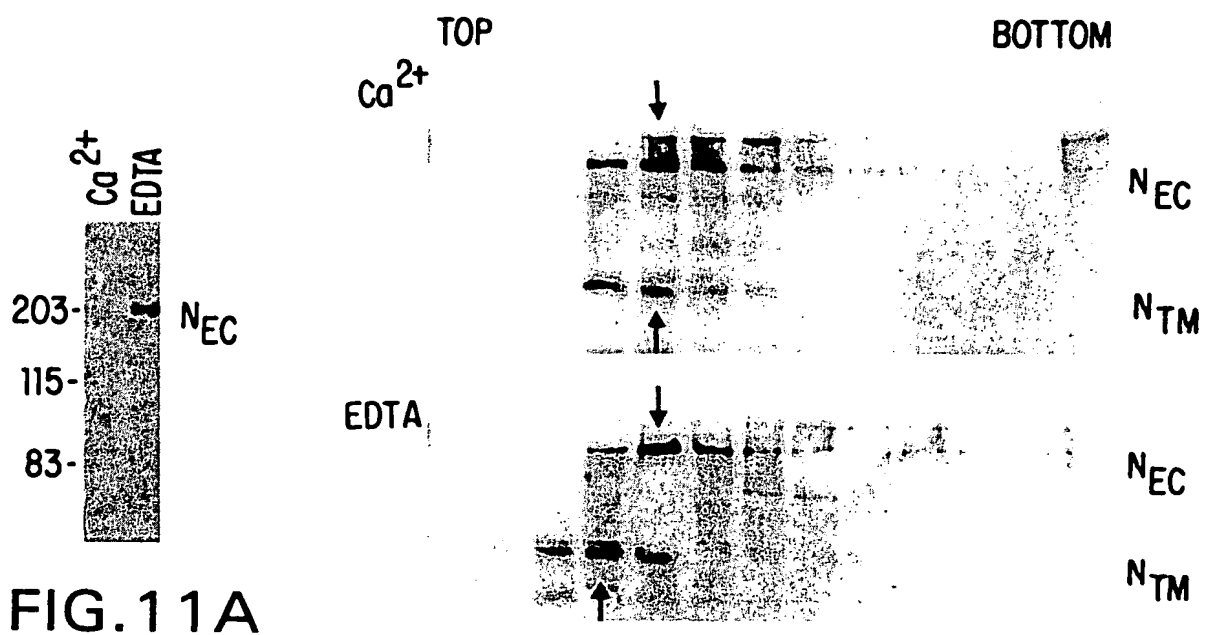


FIG. 11B